Define Improvement Targets

Establish specific goals for improving the process. The goals, in effect, set improvement boundaries, communicate expectations, and help the process improvement team set priorities. The following questions may help in describing improvement goals.

-- What issue (e.g., time delays, costs, complaints) is driving the need to improve the process and why was this process selected?

-- What are specific improvement objectives? What will constitute success (e.g., should be measurable, such as, reduce cycle time by 50%)?

-- What are boundaries of the process (where does it begin and where does it end)?

-- What are process improvement deliverables?

-- What is off-limits and what are constraints?

-- How do process improvement goals relate to organizational priorities (i.e., how important is the project)?

Identify High Impact Process Areas

- **Identify the major outputs of the process.** Outputs are work completed. Outputs can be the end result of the process, or products produced and passed from one functional area to another within the process. *Note: Identify outputs (e.g., report, training program, policy produced; pilot test results), not steps in the process (e.g., data collected, data analyzed, report drafted, report reviewed).*

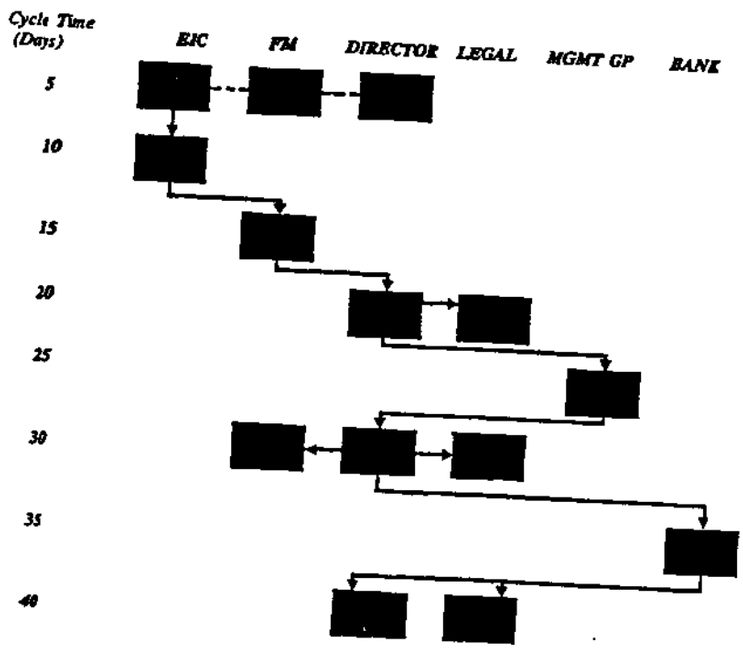
- **Prioritize outputs.** Identify those outputs that if improved would contribute most significantly to your team's improvement goals. For example, if the goals are to reduce cycle time, identify the outputs that take the longest time to produce.

- **Flow chart or further map the subprocesses** that produce the high priority outputs to develop a more detailed knowledge of the activities performed. The process team will focus improvement efforts on these subprocesses or segments of the overall process.

Define cycle times

Once all the activities are described, create a time line down the left of the chart. The time line can be in days, weeks or months depending on the most appropriate unit of measure for your process. The time line is typically a cumulative record of how much time it takes to complete the process--it starts with day one and shows how much time is transpiring as the process progresses. For each activity box, add the amount of time it takes to complete the activity.

Note: The time that is transpiring as a process progresses is very different from the time that is actually required to perform the noted activities. For example, it may only take a few hours to review a document, however, it may sit on a person's desk for thirty days before it is reviewed. In this example, thirty days is added to the time line.



Software

Software packages, such as ABC Flowchart, can be used to create process maps. For simple processes, a word or two can describe each activity. For more complex, a more detailed description of each activity is attached to the process map.

PROCESS MAPPING

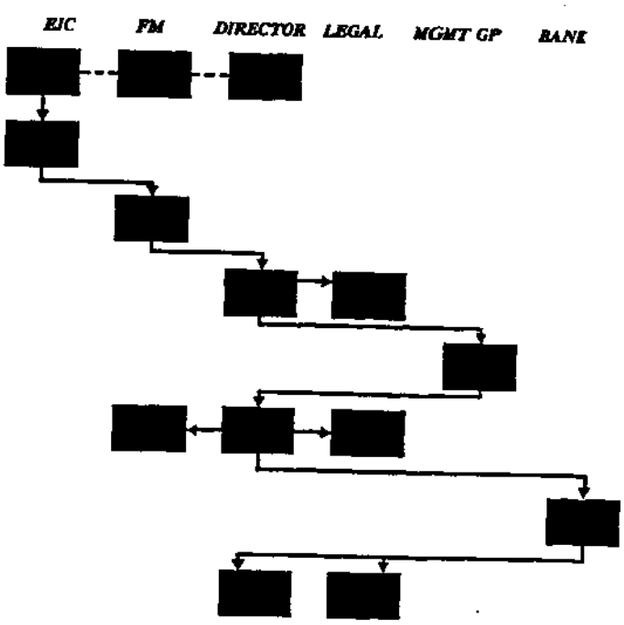
Identify Process Participants

A functional process map begins with the identification of process participants. At the top of a flip chart or piece of paper write the names of individuals or units who need to participate in process activities.

Identify Activities

The next step is to document in proper sequence all the activities or work steps performed within a process. Each activity is recorded under the person or unit responsible for performing the activity. A rectangle is drawn around each activity or work step. Connecting lines and/or arrows are used to illustrate the direction and sequence that activities flow.

Activities that are performed simultaneously by different functional areas can be displayed on the same horizontal line of the chart. For example, if two offices are reviewing a document at the same time, a box would appear under each unit and they would be aligned horizontally.



PROCESS IMPROVEMENT AND MANAGEMENT

Process Mapping	Process mapping is a flowcharting tool used to describe how work flows within the organization--from one organizational unit or person to another. Process maps often start with a functional flow chart (records the involvement of each functional area within the process). The traditional flow charts (which has specific symbols for different types of activities, e.g., a diamond symbolizes a decision point) are used to document work activities in greater detail. Process maps are used as planning and communication tools to think through and describe how a process is suppose to work. Process maps also are used to evaluate processes by documenting process weaknesses, identifying where processes are breaking down.
Business Process Improvement	Business process improvement is problem solving technique that is used to determine why a process is not operating at an optimal level of efficiency or effectiveness. Business process improvement relies on **process mapping** to document processes from start to finish, and to identify specific problem areas. However, business process improvement goes beyond mapping the process to actually identifying how it can be improved. Business process improvement is typically used by a team of employees who normally work together on a process. Identifying the customers (recipients of process outputs) and performance/outcome measures for processes is a critical part of business process improvement.
Process Management	Traditional organizations manage vertically, that is, they are hierarchically organized around functions. In these organizations, most work is managed and decisions are made within the functional hierarchies. Process management shifts the focus to a horizontal perspective--how work flows across functions. Work is managed through and decisions are made by cross functional teams who are responsible for a process from beginning to end. Process management also shifts the focus from goals and objectives of individual functional areas to desired outcomes of the overall process. All functional areas are assessed based on how they contribute to these overall outcomes. The goal of process management is to enable organizations to respond to change more quickly and effectively.

Clarify Process Measures

Develop critical process performance measures based on **customer and input requirements**. Measures should focus on efficiency (e.g., cycle time, costs, rework) and effectiveness or outcomes (e.g., customer satisfaction, resolution of identified problem). Process participants rate the relative importance of input requirements, and customers rate the importance of customer requirements. The goal is to identify the requirements that are most important to the users of the product.

- **Customer Requirements.** Identify the customers for each high priority outputs and what those customers require of the output. Customer requirements should be stated very specifically (e.g., "well-written" is not specific enough because it would not mean the same thing to all people). Try to define customer requirements in measurable terms. It is best to validate the requirements with customers, but if that is not possible, use your best understanding of what customers need.

- **Input Requirements.** Identify the suppliers and inputs need to produce for high priority outputs. For each input, identify the input requirements (e.g., Input: bank data. Requirement: data must be received by the 10th of each month and must consist of these specific data elements . . .)

Conduct Analysis

- Validate process maps with stakeholders and others involved in the process, and gather data to measure process performance based on the measures identified in the previous step.

- Analyze cycle times. Compute actual time elapsed and theoretical time (the time actually required to perform each activity--excludes wait, inspect, approve, rework time). Waste time is the difference between actual and theoretical times.

- Analyze process variation and root causes of variation or inconsistencies.

- Assess value-added. For each activity in the process indicate if the activity adds real value to the customer, is necessary for internal business functions but does not add value to the customer, or adds no value internally or to customers.

Identify Improvements

Improve the process by eliminating waste time, root causes of unwanted variation, and activities that do not add value to the customer. The process team should challenge all activities performed for internal purposes but add to value to customers. These activities also should be eliminated wherever possible.